

New Claims

1. Electromagnet for actuating a valve, the
electromagnet (28) comprising an armature (58) which
5 can be axially displaced in an armature space (57, 77)
and of which the axial motion displaces a tappet (29)
to the valve and a reflux channel (69, 71, 73)
connected to the armature space (57, 77) being
provided, via which the armature space (57, 77) is
10 connected to a tank volume (25) for removing a
pressure medium leakage flow that is flowing out of
the valve into the armature space (57, 77),
characterised in that
at least one first channel portion (69) of the reflux
15 channel (96, 71, 73) is arranged in a pole tube (50)
and in that
a second channel portion (71) of the reflux channel is
provided in a housing cover (53) and which discharges
from the housing cover (53) on a surface provided for
20 abutment against a valve housing (7).

2. Electromagnet according to claim 1,
characterised in that
the reflux channel (69, 71, 73) discharges in a
25 radially expanded portion (56) of a through
passage (51) connected to the armature space (57, 77).

3. Electromagnet according to claim 1,
characterised in that
30 the reflux channel (69, 71, 73) discharges directly
into the armature space (57, 77).

4. Electromagnet according to any one of claims 1 to 3,
characterised in that
a rear armature space (77) constructed on the side of
the armature (58) facing away from the tappet (29) is
5 connected to the armature space (57) by means of at
least one armature channel (59).
5. Electromagnet according to any one of claims 1 to 4,
characterised in that
10 the tank volume connected to the armature space (57,
77) via the reflux channel (69, 71, 73) is a tank
volume (25) constructed in the valve.